

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory

Environmental Services Branch 10625 Fallstone Road, Houston, TX 77099 Phone: (281)983-2100 Fax: (281)983-2248

Final Analytical Report

Analyses included in this report:

ABN Glycols

Report Narrative

During the analysis of samples, a sequence error occurred that prevented the ending calibration checks from running. The ending calibration checks were analyzed the next morning. No targets were found in the samples.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

Report Approvals:

Richard McMillin
Region 6 Laboratory Manager

Region 6 Laboratory Branch Chief

David Neleigh

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road Houston, Texas 77099

Sample Receipt and Disposal

| Site Name: Dimock Residential Groundw | vater Site Project Number: | 128F110 |
|---|--|------------------------------------|
| Data Management Coordinator: Christy V Data Management Gordinator Signature | | Date |
| Date Transmitted: 6/14/12 | | |
| Please have the U.S. EPA Project Manage comments or questions. | ar/Officer call the Data Management Co | oordinator at 3-2137 for any |
| Please sign and date this form below and a | eturn it with any comments to: | |
| Christy Warren Data Management Coordinator Region 6 Laboratory 6MD-HS | | |
| Received by and Date | | |
| Comments: | | |
| The laboratory routinely disposes of samp hold these samples in custody longer than | • | n completed. If you have a need to |
| Signature | Date | <u> </u> |
| Please provide a reason for holding: | | |

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ANALYTICAL REPORT FOR SAMPLES

| Station ID | Laboratory ID | Sample Type | Date Collected | Date Received |
|------------|---------------|-------------|----------------|----------------|
| FB23 | 1205010-01 | Liquid | 5/23/12 13:25 | 05/24/12 09:00 |
| HW63 | 1205010-02 | Liquid | 5/23/12 13:09 | 05/24/12 09:00 |
| HW63z | 1205010-03 | Liquid | 5/23/12 13:10 | 05/24/12 09:00 |
| FB22 | 1205010-04 | Liquid | 5/22/12 11:58 | 05/24/12 09:00 |
| HW62 | 1205010-05 | Liquid | 5/22/12 15:59 | 05/24/12 09:00 |
| HW64 | 1205010-06 | Liquid | 5/22/12 11:10 | 05/24/12 09:00 |
| HW64-P | 1205010-07 | Liquid | 5/22/12 11:40 | 05/24/12 09:00 |

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10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-01

Station ID: FB23

Batch: B2E2402 Sample Type: Liquid Date Collected: 05/23/12 Sample Vol: 1ml

Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | U | | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | U | | 2.0 | 11 | ** | 11 |
| , , | | | | • | | DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-02

Station ID: HW63

Batch: B2E2402

Sample Type: Liquid

Date Collected: 05/23/12 Sample Vol: 1ml

Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|---|----------------|-----------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | U | . • | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | Ū | | 2.0 | 11 | 11 | 11 |
| - · · · · · · · · · · · · · · · · · · · | | | | | | . DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-03

Batch: B2E2402

Sample Type: Liquid

Date Collected: 05/23/12

Sample Vol: 1ml

Sample Qualifiers:

Station ID: HW63z

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|----------------|-----------------------|--------------------|----------|----------|-----------|
| Propylene glycol (57-55-6) | U | | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | U | | 2.0 | | . 11 | . " DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-04

Station ID: FB22

Batch: B2E2402 Sample Type: Liquid Date Collected: 05/22/12 Sample Vol: 1ml

Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | U | | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | , U | | 2.0 | n | , п | . 11 |
| | | | | | | DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-05

Station ID: HW62

Batch: B2E2402 Sample Type: Liquid

Date Collected: 05/22/12 Sample Vol: 1ml

Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | υ | | 2.0 | 1. | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | · U | | 2.0 | 11 | " | · 11 |
| | | | | | | · DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-06

Station ID: HW64

Batch: B2E2402

Sample Type: Liquid

Date Collected: 05/22/12 Sample Vol: 1ml

Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result mg/L | Analyte Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|----------------|-----------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | U | | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycol (107-21-1) | · U | | 2.0 | и . | " | . 10 |
| | | | | | | DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS

Lab ID: 1205010-07

Station ID: HW64-P

Batch: B2E2402 Sample Type: Liquid Date Collected: 05/22/12

Sample Vol: 1ml Sample Qualifiers:

Targets

| Analyte (CAS Number) | Result Analyte mg/L Qualifiers | Reporting Limit | Dilution | Prepared | Analyzed |
|----------------------------|-----------------------------------|--------------------|----------|----------|----------|
| Propylene glycol (57-55-6) | Ω · | 2.0 | 1 | 05/24/12 | 05/24/12 |
| Ethylene glycól (107-21-1) | U | 2.0 | 11 | 11 | 11 |
| | • | • | | | DG |

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Glycols by Direct Aqueous Injection Modified 8270 - GC/MS - Quality Control

Batch: B2E2402 Sample Type: Liquid

Blank (B2E2402-BLK1)

Prepared: 5/24/2012 Analyzed: 5/24/2012

Targets

| ANALYTE | Result mg/L | Analyte Reporting Qualifiers Limit | |
|------------------|----------------|------------------------------------|--|
| Propylene glycol | U | 2.0 | |
| Ethylene glycol | Ŭ | 2.0 | |

LCS (B2E2402-BS1)

Prepared: 5/24/2012 Analyzed: 5/24/2012

Targets

| ANALYTE | Result mg/L | Analyte Reporting Qualifiers Limit | Spike Level | %REC %REC Limits |
|------------------|----------------|------------------------------------|----------------|---------------------|
| Propylene glycol | 9.2 | 2.0 | 10.0 | 91.8 70-130 |
| Ethylene glycol | 9.4 | 2.0 | 10.0 | 94.3 70-130 |

Matrix Spike (B2E2402-MS1)

Source: 1205010-05

Prepared: 5/24/2012 Analyzed: 5/24/2012

Targets

| ANALYTE | Result mg/L | Analyte Reporting Qualifiers Limit | Spike Level | Source Result | %REC | %REC Limits | |
|------------------|----------------|---------------------------------------|----------------|------------------|------|----------------|--|
| Propylene glycol | 9.8 | 2.0 | 10.0 | | 98.3 | 70-130 | |
| Ethylene glycol | 11.1 | 2.0 | 10.0 | | 111 | 70-130 | |

Matrix Spike Dup (B2E2402-MSD1)

Source: 1205010-05

Prepared: 5/24/2012 Analyzed: 5/24/2012

Targets

| | | | Analyte Reporting | | | | %REC | | RPD |
|---|------------------|------|-------------------|-------|--------|------|--------|------|-------|
| ı | ANALYTE | mg/L | Qualifiers Limit | Level | Result | %REC | Limits | RPD | Limit |
|] | Propylene glycol | 9.0 | 2.0 | 10.0 | | 90.0 | 70-130 | 8.89 | 30 |
|] | Ethylene glycol | 10.5 | 2.0 | 10.0 | | 105 | 70-130 | 5.58 | 30 |

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STATES STATES

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Notes and Definitions

A This sample was extracted at a single acid pH.

HTS Sample was prepared and/or analyzed past recommended holding time. Concentrations should be

considered minimum values.

AES Atomic Emission Spectrometer

CVAA Cold Vapor Atomic Absorption

ECD Electron Capture Detector

GC Gas Chromatograph

GFAA Graphite Furnace Atomic Absorption

ICP Inductively Coupled Plasma

MS Mass Spectrometer

NA Not Applicable

NPD Nitrogen Phosphorous Detector

NR Not Reported

TCLP Toxicity Characteristic Leaching Procedure

U Undetected

Out of QC limits

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds *per* square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.

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